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Y. Denis Yerlikaya

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TYCO HEALTHCARE GROUP LLP

ATTEN: Intellectual Property Dept. Docketing Clerk

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EXAMINER

JAGAN, MIRELLYS

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-5, 9, 11, 13, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,008,614 to Turner et al [hereinafter Turner] in view of U.S. Patent 5,720,293 to Quinn et al [hereinafter Quinn].

Turner discloses an electronic thermometer comprising:

an interchangeable, removable module (10) having a temperature probe with a thermistor as a temperature sensor, mating terminal, probe storage chamber, and a cable assembly having a connecting portion with mating terminals for electrically connecting to a portable temperature calculating unit (18);

wherein the temperature calculating unit receives the thermistor signal for providing a temperature measurement, and has a header assembly with terminals in electrical connection with a microprocessor system, and a probe cover storage chamber; the header assembly removably mates with the terminals of the removable module; and the chamber for storing the probe is able to prevent storage of the probe while a cover is installed on the probe.

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Turner does not disclose the removable module having a memory for storing predetermined calibration information specific to the thermistor at the time of manufacture for use by the temperature calculating unit for calibrating the thermistor, probe-specific algorithm parameters, or probe identifying information, wherein the memory is capable of electrical communication with the temperature calculating unit when the removable module is installed to the temperature calculating unit, and includes calibration point parameters at different temperatures taken during manufacture of the module for calibrating the probe, and is incorporated in a connection portion in the probe assembly of the removable module, the memory being an EEPROM, and the memory storing a unique ID number associated with the probe that is a pre-programmed and validated EEPROM registration number for determining the type of module; the removable unit having the cover storage chamber; and the calibration parameters being resistance values.

Quinn discloses an electronic thermometer comprising a removable unit that includes a temperature sensor and a memory (EEPROM) for storing calibration information, probe-specific algorithm parameters, or probe identifying information, wherein the memory is capable of electrical communication with a temperature-calculating unit when the removable unit installed to the temperature-calculating unit, and includes calibration point parameters at different temperatures for calibrating the probe and is incorporated in the probe assembly of the removable unit, and is incorporated in the probe assembly of the removable unit, and the memory storing a unique ID number associated with the probe that is a pre-programmed and validated EEPROM registration number; the sensor being a thermistor and the calibration parameters being resistance values. Quinn teaches that it is useful to provide the memory in the

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removable unit in order to store patient information and calibration information for ease of use (see abstract).

Referring to claims 1 and 5, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner by providing a memory in the removable unit, as taught by Quinn, in order to store patient information and calibration information for ease of use. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner and Quinn by taking the calibration reference point parameters during manufacture of the module in order to provide a calibrated thermometer when the thermometer is first used to measure temperature.

In addition, Turner teaches that the removable unit is removable in order to prevent the rest of the thermometer housing from being contaminated by a contaminated probe. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner by integrating the cover chamber with the removable unit instead of the temperature calculating unit in order to ensure that contaminated probe covers are not used by a clean removable unit when a contaminated probe is replaced.

Referring to claim 5, in utilizing the device disclosed by Turner and Quinn above to measure temperatures, the method steps of claim 5 will be followed.

Referring to claim 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermometer disclosed by Turner and Quinn by placing the memory in a connection portion in the probe assembly of the removable module in

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order to minimize the distance and amount of wiring needed to connect the memory to the temperature calculating unit.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Quinn, as applied to claims 1, 3-5, 9, 11, 13, 18, and 21 above, and further in view of the Prior Art disclosed by Applicant on page 18, lines 24-27 of the specification [hereinafter Prior Art].

Turner and Quinn disclose an electronic thermometer having all of the limitations of claim 8, as stated above in paragraph 2, except for the EEPROM being a 256 bit, 1-wire, parasite-power EEPROM.

The Prior Art discloses that a 256 bit, 1-wire, parasite-power EEPROM is a known EEPROM that is commercially available from Dallas Semiconductor under the model number DS2430A.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module of the thermometer disclosed by Turner and Quinn by replacing the EEPROM with the EEPROM from Dallas Semiconductor, since the Prior Art discloses that the EEPROM from Dallas Semiconductor is known to be commercially available to one having ordinary skill in the art, and since these EEPROMs are alternative and equivalent means for providing memory in the electronic thermometer.

4. Claims 14, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner and Quinn, as applied to claims 1, 3-5, 9, 11, 13, 18, and 21, above, and further in view of Denzene.

Turner and Quinn disclose an electronic thermometer having all of the limitations of claims 14, 16, and 19, as stated above in paragraph 2, except for the terminals of the removable module and the temperature-calculating unit being fluid-resistant,

Denzene discloses an electrical device having a connector component that is fluid resistant. The area of the connector component that has connecting terminals is made resistant to fluid incursion in order to prevent the electrical components within the connector from being damaged by liquids (see figures 6 and 7).

Referring to claim 14, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the removable module and the temperature-calculating unit disclosed by Turner and Quinn by making the mating terminals fluid-resistant, as disclosed by Denzene, since Denzene teaches that making the mating terminals fluid-resistant is beneficial in order to prevent the electrical components within from being damaged by liquids.

Response to Arguments

5. Applicant's arguments have been considered but are not persuasive.

Applicant's arguments that Turner fails to disclose storing calibration parameters of the thermistor in a memory of the temperature probe, and that Quinn fails to disclose a portable calculating unit for measuring the temperature of a patient or an interchangeable temperature probe adapter, are not persuasive since the rejections are not based on Turner disclosing storing calibration parameters of the thermistor in a memory of the temperature probe and Quinn disclosing a portable calculating unit or an interchangeable temperature probe adapter. The rejections are based on Turner's teaching of a portable calculating unit and an interchangeable

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temperature probe module, and Quinn's teaching of using a memory to store calibration parameters of a thermistor used for temperature measurement. Applicant's arguments are against the references individually. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, in response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But, so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the Examiner's conclusion of obviousness is based upon only the teachings of Turner and Quinn, which was knowledge that was within the level of ordinary skill at the time the claimed invention was made, and, therefore, does not include knowledge gleaned only from the Applicant's disclosure

Applicant's arguments that the Examiner has not provided any motivation for combining the references are not persuasive since the Examiner stated the motivation for combining the references in the rejections above, e.g., providing a memory in the removable unit in order to store patient information and calibration information for ease of use, as taught by Quinn.

Lastly, Applicant's arguments that Quinn fails to disclose a 256 bit, 1-wire, parasite-power EEPROM are not persuasive since Quinn was not relied upon to teach this

feature. The rejections are based on the Prior Art's teaching of using a 256 bit, 1-wire, parasite-power EEPROM for providing memory in an electronic thermometer.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 571-272-2247. The examiner can normally be reached on Monday-Thursday from 8AM to 4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
August 8, 2006


GAIL VERBITSKY
PRIMARY EXAMINER